

CLAIMS

1. A hybrid telecommunications switch apparatus comprising:
one or more circuit switch fabrics,
one or more packet switch fabrics,
a controller configured to route telecommunications traffic to one or the other of the said circuit or packet switch fabrics.
2. The apparatus of claim 1 wherein the controller is further configured to examine traffic overhead information to determine which of said switch fabric types to route the traffic to.
3. The apparatus of claim 2 wherein the overhead information is a SONET/SDH path overhead byte.
4. The apparatus of claim 3 wherein the overhead byte is a C2 overhead byte.
5. The apparatus of claim 1 wherein the circuit switch fabric is a synchronous transport signal (STS) crossconnect.
6. The apparatus of claim 1 wherein the packet switch fabric is configured to switch internet protocol (IP) or asynchronous transfer mode (ATM) traffic.
7. The apparatus of claim 1 further comprising a plurality of circuit switch fabrics.
8. The apparatus of claim 1 wherein the controller is configured to examine a path overhead byte associated with received traffic and to thereby determine whether the traffic is ATM, IP, or STM traffic.

9. The apparatus of claim 8 wherein the controller is configured to dynamically allocate circuit switch resources to ATM traffic to route the traffic to a packet switch fabric for switching.
10. The apparatus of claim 9 wherein the controller is configured to dynamically allocate circuit switch resources to IP traffic to route the traffic to a packet switch fabric for switching.
11. A method of switching telecommunications traffic in a hybrid switch including an (circuit) switch fabric, an packet switch fabric, and a controller, the method comprising the steps of:
- (A) provisioning the circuit switch fabric for IP, ATM, and circuit traffic,
 - (B) determining whether received traffic is IP, ATM, or circuit traffic, and
 - (C) switching the received traffic in an packet or circuit switch fabric in response to the determination of step (B).
12. The method of claim 11 wherein the determining step (B) comprises the step of:
- (B1) the controller examining traffic overhead information to determine which of said types of traffic has been received.
13. The method of claim 12 wherein the step (B1) comprises the step of:
- (B2) the controller examining an SONET/SDH path overhead byte.
14. The method of claim 13 wherein the overhead byte is a C2 overhead byte.
15. The method of claim 14 wherein the step (C) of switching comprises the step of:
- (C1) the controller directing ATM traffic to a packet switch fabric.

16. The method of claim 14 wherein the step (C) of switching comprises the step of:
(C2) the controller directing IP traffic to a packet switch fabric.
17. The method of claim 14 wherein the step (C) of switching comprises the step of:
(C3) the controller directing traffic that is neither ATM or IP traffic to the circuit switch fabric.
18. The method of claim 14 wherein the step (C) of switching comprises the step of:
(C4) the controller dynamically allocating circuit switch resources to ATM traffic to route the traffic to a packet switch fabric for switching.
19. The method of claim 14 wherein the step (C) of switching comprises the step of:
(C5) the controller dynamically allocate circuit switch resources to IP traffic to route the traffic to a packet switch fabric for switching.